

Claims

1. An apparatus for use in creating a family of elevator bucket configurations, each family having at least one dimension in common; with each bucket configuration within each family having at least one dimension which varies from other bucket configurations within the family; the apparatus comprising a mold base having a bucket interior forming portion and a bucket exterior forming portion, the bucket exterior forming portion having a cavity therein configured to be larger than the largest desired bucket configuration within the family and having an outer core oriented therein which is configured to be smaller than the smallest desired bucket configuration within the family; the bucket interior forming portion having a cavity therein which is smaller than the cavity in the exterior forming portion and also having an interior core oriented therein which is configured to be smaller than the smallest desired bucket configuration within the family; the outer core having one surface which aligns with an opposing surface of the inner core but being spaced a predetermined distance therefrom; the apparatus further including a plurality of pairs of outer surface inserts with each pair of inserts engaging about the outer core and extending along a height of the core to define an exterior surface of a bucket of a desired dimensional configuration, each pair of outer surface inserts being of differing dimensions corresponding to a particular desired outer configuration for one bucket of the family; and a

plurality of pairs of inner surface inserts with each pair of inserts engaging about the inner core and extending along a height of the core to define an interior surface of a bucket of desired dimensional configuration, each pair of inner surface inserts being of differing dimension corresponding to a particular desired inner configuration for one bucket of the family, each inner surface insert having at least one surface which aligns with an opposing surface of a corresponding outer surface insert and being spaced a predetermined distance therefrom.

2. A method for creating any elevator bucket of a family of elevator bucket configurations, each family having at least one dimension in common; with each bucket configuration within each family having at least one dimension which varies from other bucket configurations within the family: the method comprising the steps of:

- selecting a desired dimensional configuration for an elevator bucket to be molded;

- determining to which family the bucket belongs;

- selecting a mold base corresponding to the family to which the bucket belongs;

- selecting appropriate inner and outer inserts necessary to produce the desired dimensional configuration for the bucket and placing same into a corresponding forming portion of the mold base about a core thereof seated within a cavity of each forming

portion;

bringing the forming portions together;

injecting material from which the bucket is to be formed;

allowing the material to cool;

separating the forming portions;

ejecting the formed bucket; and, if desired,

creating another bucket by repeating the steps of the method.

3. A mold base for use in creating a family of buckets, the mold base including a common core and removable core and inserts for forming an inner surface of an elevator bucket with different core inserts being engaged to the common core to alter the inner dimension of the elevator bucket, the mold base also having a common cavity and removable cavity inserts for forming the outer surface of the elevator bucket with different inserts being engaged to the common core to alter the outer dimension of the elevator bucket.